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EXAMINER

A, PHI DIEU TRAN

ART UNIT PAPER NUMBER

3637

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/775,074

Applicant(s)

REICHERT, GERHARD

Examiner

Phi D. A

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-30, 32-34 and 36-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-25, 28-30, 32-34 and 36-49 is/are rejected.
- 7) ☒ Claim(s) 26 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/21/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 39 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Line 13 “ of the window” is lacking antecedent basis.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 23, 30, 32-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Reed (4567710).

Reed (figure 13-14) shows a simulated divided lite insulating glazing unit having an internal muntin bar, the unit comprising first and second spaced glass sheets (5,6, fiberglass) spaced apart by a perimeter spacer, the first and second glass sheets and spacer defining an insulating chamber, an internal muntin bar (figures 13-14) disposed inside the insulating chamber, the internal muntin bar extending away from the perimeter spacer (figure 2 part 4) to divide the insulating chamber into separate portions to provide a divided lite appearance to the glazing unit, the internal muntin bar having a rigid inner muntin grid element (34), a flexible,

collapsible outer muntin grid element (9, top and bottom), when separated from the inner muntin grid element, the collapsible outer muntin grid element being capable of being collapsed upon itself to a collapsed position and reopened to an open position wherein the outer muntin grid element defines a longitudinal opening, the outer muntin grid element substantially surrounding the inner muntin grid element to hide the inner muntin grid element from view on both sides of the insulating glazing unit (per the parts 9, top and bottom), the outer muntin grid element is connected to the inner muntin grid element with a connector (28, 30), the outer muntin grid element including at least on protruding foot (25) that increases the width of the outer muntin grid element, the foot protruding in a direction perpendicular to the first and second glass sheets, the outer muntin grid element is resilient (ability to flex and return original position as disclosed on col 4 line 59), the outer muntin grid element surrounding at least three sides of the inner muntin grid element, the outer element being a collapsible and resilient flexible tube (tube made of two parts, and the claim has not set forth the tube being one piece either) capable of being collapsed upon itself and reopened to a tube form, the outer muntin grid substantially surrounds the inner muntin grid element,

3. Claims 23, 28-30, 32-34, 36, 39, 42-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Berdan (4850175).

Berdan (figure 9) shows a simulated divided lite insulating glazing unit having an internal muntin bar, the unit comprising first and second spaced glass sheets (G) spaced apart by a perimeter spacer(50), the first and second glass sheets and spacer defining an insulating chamber, an internal muntin bar (30c, D) disposed inside the insulating chamber, the internal muntin bar extending away from the perimeter spacer (50) to divide the chamber into separate portions to

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provide a divided lite appearance to the unit (the claim is not specific as to what the portions look like), the internal bar having a rigid inner muntin grid element (D), a flexible, collapsible outer muntin grid element (30c), when separated from the inner muntin grid element, the collapsible outer muntin grid element being capable of being collapsed upon itself to a collapsed position and reopened to an open position wherein the outer muntin grid element defines a longitudinal opening, the outer muntin grid element substantially surrounding the inner muntin grid element to hide the inner muntin grid element from view on both sides of the insulating glazing unit, the outer muntin grid element is in the form of a continuous tube disposed around the inner muntin grid element, the outer muntin grid element is connected to the inner muntin grid element with a connector (the concavity of the 70), the outer muntin grid element including at least on protruding foot (the part that is connected to part 74) that increases the width of the outer muntin grid element, the foot protruding in a direction perpendicular to the first and second glass sheets, the outer muntin grid element is resilient, the outer muntin grid element surrounding at least three sides of the inner muntin grid element, the outer element being a collapsible and resilient flexible tube capable of being collapsed upon itself and reopened to a tube form, the outer muntin grid substantially surrounds the inner muntin grid element, the outer element having an inner surface and an outer surface, the tube having a sidewall and the slit extending from the inner surface to the outer surface through the sidewall of the tube, the tube defining a longitudinal slit that allows the tube to be wrapped around the inner muntin grid element, the slit extending from the inner surface to the outer surface of the outer element..

4. Claims 44-47, 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Kessler (4113905).

Kessler (figure 1) shows in combination an inner muntin grid element (12) and an outer muntin grid element used to form a muntin grid piece, the outer muntin grid element (21) being adapted to fold around the inner muntin grid element, the inner muntin grid element having a longitudinal direction, a plurality of spaced corners (parts 24) and a cross sectional perimeter dimension measured about a cross section viewed normal to the longitudinal direction of the inner muntin grid element (12), the combination comprising an outer muntin grid element (21) having a body having a width and a longitudinal direction, the body having spaced, parallel longitudinal ends that define the width of the body, the width being substantially equal to the cross sectional perimeter dimension of the inner muntin grid element, the body defining one corner notch for each corner of the inner muntin grid element (where inner element's corners touching the notches of the outer element), the corner notches being spaced apart to align with the corners of the inner muntin grid element when the body is wrapped around the inner muntin grid element, the body is flexible, the body being resilient, the body being fabricated from a foam, an adhesive connected to the body (inherently so as the adhesive is part of the foam material which bonds to the glass and the inner member when cured), the adhesive adapted to connect the body to the inner muntin grid element when the body is wrapped around the inner muntin grid element.

5. Claims 44-46 are rejected under 35 U.S.C. 102(b) as being anticipated by Stoakes (4756131).

Stoakes (figure 2) shows in combination an inner muntin grid element (42) and an outer muntin grid element used to form a muntin grid piece, the outer muntin grid element (44) being adapted fold around the inner muntin grid element, the inner muntin grid element having a

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longitudinal direction, a plurality of spaced corners and a cross sectional perimeter dimension measured about a cross section viewed normal to the longitudinal direction of the inner muntin grid element (42), the combination comprising an outer muntin grid element (44) having a body having a width and a longitudinal direction, the body having spaced, parallel longitudinal ends that define the width of the body, the width being substantially equal to the cross sectional perimeter dimension of the inner muntin grid element, the body defining one corner notch for each corner of the inner muntin grid element (where inner element's corners touching the notches of the outer element), the corner notches being spaced apart to align with the corners of the inner muntin grid element when the body is wrapped around the inner muntin grid element, the body is flexible, the body being resilient,

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stoakes in view of Donaldson (6192651).

Stoakes shows all the claimed limitations except for the outer element being fabricated from a foam material.

Donaldson discloses foam material (24) forming an outer element.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Stoakes to show the outer element being fabricated from a foam material as taught by Donaldson because foam material is a well known material for forming a grid element as it has great heat insulation property and light weight.

8. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stoakes in view Donaldson (6192651) as applied to claim 47 above and further in view of Baier (5345743).

Stoakes as modified shows all the claimed limitations except for the outer element having a desiccant.

Baier discloses desiccant within an insulated glass to absorb moisture within the glass chamber.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Stoakes's modified structure to show the outer element being the outer element having a desiccant as taught by Baier because it would help absorb moisture seeping into the double layer glass panel and thus keeping the panel clear.

9. Claims 24, 37, 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berdan (4850175) in view Donaldson (6192651).

Berdan shows all the claimed limitations except for the outer element being fabricated from a foam material.

Donaldson discloses foam material (24) forming an outer element.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Berdan to show the outer element being fabricated from a foam material as

taught by Donaldson because foam material is a well known material for forming a grid element as it has great heat insulation property and light weight.

10. Claim 25, 38, 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoakes in view Donaldson (6192651) as applied to claims 25, 37 or 40 above and further in view of Baier (5345743).

Berdan as modified shows all the claimed limitations except for the outer element having a desiccant.

Baier discloses desiccant within an insulated glass to absorb moisture within the glass chamber.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Berdan's modified structure to show the outer element being the outer element having a desiccant as taught by Baier because it would help absorb moisture seeping into the double layer glass panel and thus keeping the panel clear.

11. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kessler(4113905) in view of Baier (5345743).

Kessler shows all the claimed limitations except for the outer element having a desiccant.

Baier discloses desiccant within an insulated glass to absorb moisture within the glass chamber.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Kessler's structure to show the outer element being the outer element having a desiccant as taught by Baier because it would help absorb moisture seeping into the double layer glass panel and thus keeping the panel clear.

Allowable Subject Matter

12. Claims 26-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter: prior art does not show the slit being closed when the outer muntin grid element is in its open position in combination with other claimed limitations.

Response to Arguments

14. Applicant's arguments filed 11/21/05 have been fully considered but they are not persuasive.

Applicant states that Reed does not show the bar having a flexible, collapsible outer muntin grid element substantially surrounding a rigid inner muntin grid element, examiner respectfully disagrees. As shown by figures 13-14, the inner muntin grid element (35) is **substantially** surrounded by the outer element on both sides of the insulating unit. The outer elements hiding the inner element from view on both sides of the unit, and the claimed language does not require that the inner element being completely out of sight on both sides of the insulating unit either. This interpretation is consistent with applicant's claimed limitations of "substantially surrounded". The argument is thus moot.

With respect to Reed being not flexible and collapsible in the manner as claimed, examiner respectfully disagrees. Reed shows the limitations as claimed. What is it that is in the structure as claimed that differentiates applicant's structures from that of Reed? What makes applicant's flexibility and collapsible as claimed different from that disclosed in Reed? Reed

shows all the structures as claimed and even disclosed the structure being flexible. Reeds thus shows the limitations as claimed.

With respect to Reed being not a tube as the tube disclosed in Reed being two pieces, examiner respectfully states that the claimed limitations do not limit the tube to being one or two pieces. The reference thus teaches the limitation of “tube” as claimed. If it is applicant’s intention to have the tube being made of piece only, applicant is invited to put the limitation in the claim.

With respect to Berdan not teaching a muntin grid piece structure, examiner respectfully points out that the reference shows the limitations as claimed. Berdan inherently can function as muntin grid piece structure as claimed. The argument is thus moot.

With respect to Kessler, applicant states that the reference does not teach “folded” as claimed, examiner respectfully disagrees. The reference clearly shows the outer muntin element folding over the inner muntin element as claimed. applicant also states that Kessler does not spaced longitudinal ends that define the width of the body, examiner respectfully disagrees. A width by natural is made up of its length, with the length terminating in longitudinal ends. Kessler shows an element having a width, and the width thus inherently has longitudinal ends. The reference thus shows the limitations as claimed. With respect to the “notches”, examiner respectfully points out that the notches are on the inside of the corners of the element as set forth above. With respect to applicant’s statement to “to be folded”, examiner respectfully points out that the claim is an article claim, not a method claim. The argument is thus moot.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 571-272-6864. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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2/6/06